

Ayton Hill (28A)

Report of survey carried out by Alan Dawson on 7 June 2013

1. Introduction

The primary purpose of this survey was to measure the height and drop of Ayton Hill, a marginal Submarilyn with 149m drop, based on a height of 217m and col estimated at 68m from interpolation between the 65m and 70m contours shown on the OS 1:25000 map. The secondary purpose was to establish which was the highest point, as there are two 217m spot heights shown on large-scale OS maps. There is a further very small 215m contour ring around the trig pillar (also 215m), but this was not a candidate for the highest point and was not surveyed. Heights were measured using a Leica Geosystems 1250 GPS receiver and antenna, with subsequent processing by John Barnard using OS Rinex data to obtain precise measurements. Conditions for the survey were excellent: dry and clear with little breeze and no midges.

2. West summit survey

The hill lies about 5km south of Eyemouth on the east coast and just 3km from the English border. OS maps show the name Ayton Hill as referring to a 202m summit about 1km north of the two 217m points. The west top is shown as 217m on the Landranger map, and this was surveyed first. The summit is only about 500m from the minor road to the north, but the approach was longer than this owing to a detour to avoid livestock and electric fences. The summit was an unmarked but fairly well-defined and well-cropped grassy mound, with sheep and cattle grazing all around. As the area was open and the grass short, a survey pole was not required, so the GPS antenna was placed flat on the ground, connected to its controller by a cable. The controller was knocked over at some point during the survey, presumably by a cow, but continued to work normally. If the antenna had been knocked over then the survey would have had to be restarted. A small stone cairn was built at the end of the survey to mark the summit, but this may not survive long under tampering hooves. Result:

West summit: 90 minutes at NT 94441 58650, height 217.01m \pm 0.1m

While the survey was in progress, sightings with an Abney level were made to the east summit and back, which indicated that the west summit was higher. Sightings of both summits from a third point confirmed this impression. Sightings from the trig pillar confirmed that it is lower than the east summit.

3. East summit survey

There were two caravans parked on the east summit, connected to two radio masts in what looked to be a permanent arrangement, at the exact point where large-scale maps show a 217m spot height, just to the east of an electric fence. However, the centre of the 215m contour ring is to the west of the fence, and this appeared to be at least as high as the ground underneath the caravans, if not slightly higher. The second survey point was therefore set up a few metres west of the electric fence and caravans. The grass there was uncropped but not very high, so again the antenna was placed flat on the ground. It was far enough away from the caravans to ensure that they did not interfere with satellite signals. Result:

East summit: 70 minutes at NT 94815 58503, height 216.07m \pm 0.2m

The results clearly show the west summit to be the highest point of the hill, by about one metre.

While the east summit survey was in progress, a somewhat rotund figure in shorts emerged from one of the caravans, so it seemed appropriate to offer him an explanation of why a scruffy old chap was lounging around just a few metres away with some odd-looking equipment. Caravan man immediately offered a cup of coffee and a demonstration of the equally odd-looking equipment inside one of the caravans. He turned out to be an amateur radio enthusiast called Landles who had been staying there for three days. As he was an old friend of the local farmer (Francis), he was able to pop up to the caravan on a regular basis, where he could usually get much clearer reception than at his home in Eyemouth. However, a solar flare had temporarily knocked out nearly all radio reception, so he was unable to chat to his friends in New Zealand or Japan. He was therefore keen to talk to this surveyor chap who had unexpectedly appeared in the field next to his summit retreat. Landles' call sign is GM4XZZ (see www.qrz.com/db/GM4XZZ) and the name of his summit station is Lambert Hill, as distinct from Ayton Hill, which he clearly identified as referring to the hill with the mast on to the north.

4. Col survey

The col separating Lambert Hill from higher ground is about 6km west of the summit, in square NT8859. The Landranger map shows the col to be between Billiemire Burn flowing west and Horn Burn flowing east. However, both burns have been excavated and are in effect man-made drains in that area. In between them there is now a wild overgrown pond in the col area that is disconnected from both burns, fenced off and surrounded by high nettles. This made it very difficult to establish a single definite col location.

Anyone descending from the higher ground to the north would not need to enter the pond area but could pass on either side of it, between the two burns, before climbing up toward Lamberton Hill. It was clear that two survey points would be advisable, west and east of the pond, in order to measure the col location and height. Fortunately, the ground in both locations was relatively survey friendly, with well-cropped grass at the west side and arable land to the east with bare soil at its margin. Results:

East col: 60 minutes at NT 88511 59517, height 66.08m ± 0.2m

West col: 30 minutes at NT 88415 59480, height 66.52m ± 0.2m

5. Summary and conclusions

Hill name:	Lamberton Hill, section 28A
Summit:	217.0m at NT 94441 58650
Col:	66.5m at NT 88415 59480
Drop:	150.5m
Category:	Marilyn (promoted from Submarilyn), Hump, Tump

Lamberton Hill therefore becomes a new Scottish Marilyn, albeit only 3km from England, with Ayton Hill being removed from the list of Submarilys.

6. Access

Lamberton Hill is agricultural land, and the summit area was being grazed by both sheep and cattle at the time of the survey. However, there are no apparent access restrictions, and the local farmer is said to be relaxed about having walkers on his land, although this was not confirmed in person.

There is space to park a single car on the grass verge a few metres east of the road junction at NT944591, from where a gate opens on to a grassy path south toward the hill, past the remains of Habchester fort. This approach leads to electric fences around the summit area, which can be climbed over with help from a wooden fence in the corner to the west of the summit. An alternative approach that avoids electric fences is via the track starting at NT949588. This leads up to the lower eastern summit and the caravans and so may appear intimidating to the wary bagger. However, it appears that the caravans are empty much of the time, and if anyone is there it is likely to be Landles, who appears to welcome visitors, especially those interested in amateur radio. There is an electric fence between the two summits, but this can be avoided via a gate to the south.



Summit area on Lamberton Hill west top, showing the old fort, with the mast on Ayton Hill beyond

Lamberton Hill east top from the higher west top





Lamberton Hill trig point and east top

Old quarry west of the Lamberton Hill col, now in recreational use by the farmer at Causewaybank



Survey point at Lamberton Hill col (east), looking north

Survey point at Lamberton Hill col (east), looking east, with the blocked-off end of Horn Burn behind





Survey point at Lambertton Hill col (east), looking south

Survey point at Lambertton Hill col (west), looking east over the pond area, with bird hides at its edge



Survey point at Lambertton Hill col (west), looking north

Survey point at Lambertton Hill col (west), looking south

